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November 13, 1990

Mr. Michael Towle (3HW21)  
Remedial Project Manager  
U.S. Environmental Protection Agency  
Region III  
841 Chestnut Street  
Philadelphia, PA 19107

Re: C&D Recycling Site  
Foster Township, PA

Dear Mike:

Enclosed are five (5) copies of the monthly progress report pertaining to the Remedial Investigation and Feasibility Study at the C&D Recycling Site. The report was prepared by Fred C. Hart Associates, Inc.

Please contact me if you have any questions regarding the report.

Sincerely,

A handwritten signature in cursive script that reads "J. T. Chikowski".

J. T. Chikowski  
Senior Engineer

Enc.

AR200328

**C&D RECYCLING SITE  
PROJECT STATUS REPORT  
NUMBER 32**

Period Covering: 10/01/90 to 10/31/90

Prepared by: Scott K. Bryant

Date: 11/09/90

HART Project N<sup>o</sup>: NY323-02

Task N<sup>o</sup>: 02

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**Action This Period:**

Revisions to the Risk Assessment Report continued during this report period.

HART received conditional approval of the RI pending the inclusion of EPA comments.

Benthic sampling of the pond south of the Site continued this period and is expected to be completed during the next period.

HART has received the analytical results for the TCLP and EP Toxicity analyses performed on the soil samples collected on July 31, 1990. With the exception of the EP Toxicity metals results for sample D-500, all validated analytical results are summarized on the attached tables. The TCLP procedure was designated because this analytical protocol is required when considering disposal options. In addition, HART opted to analyze the soil samples for EP Toxicity because this analytical method was previously used to characterize the leachability of samples from the site. Hence, concurrent TCLP and EP Toxicity analyses provide a useful basis for comparison.

The parameters reported under the EP Toxicity procedure are also reported under the TCLP procedure. However, there are two differences between these analytical methodologies:

- 1) During the EP Toxicity procedure, acetic acid is added until the pH is 5.0 whereas the TCLP procedure is based on a buffered solution with a pH of approximately 5.0.
- 2) The EP Toxicity analysis is performed for 24 hours whereas the TCLP analysis is performed for  $18 \pm 2$  hours.

The buffered solution for the TCLP procedure contains more acetate ion than the solution for the EP Toxicity procedure. Metals, especially lead, have a high affinity for the acetate ion. For this reason, the metals results from the TCLP procedure can be expected to be higher than those from the EP Toxicity procedure especially if the soil sample has a low buffering capacity.

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**C&D RECYCLING SITE  
PROJECT STATUS REPORT  
NUMBER 32  
(continued)**

The following describes the QA/QC results for each group of parameters:

- **TCLP Analyses:**

Volatiles: All results are invalid because the TCLP extraction was not performed within the specified 14 day holding time.

Semi-Volatiles: All results are invalid. Samples C-800 and D-500 were analyzed within the TCLP extraction time, however, three of the six surrogates were below 10% recovery rendering the results invalid. These two samples were reanalyzed along with the ash and F-600 samples outside of the TCLP extraction times so the results are invalid.

Pesticides: All results are valid and are below detection limits.

Herbicides: Results for samples F-600 and ash are valid and below detection limits. Results for sample C-800 should be considered estimates because the surrogates were outside control limits for the first analysis and a reanalysis of the sample. The laboratory documentation of the results for both analyses was sufficient to verify that the target herbicides were not present above method detection limits. Results for sample D-500 are invalid because the method extraction time of 14 days was exceeded.

Metals: All results are valid and are summarized in an attached table. Analytical results for sample D-500 have still not been received.

- **EP Toxicity Analyses:**

Metals: All results are valid and are summarized in an attached table.

Pesticides: All results are valid and are below detection limits.

Herbicides: All results are valid but should be considered estimates because the surrogates were outside control limits for the first analysis and a reanalysis of the samples. The laboratory documentation of the results for both analyses was sufficient to verify that the target herbicides were not present above method detection limits.

AR200330

**C&D RECYCLING SITE  
PROJECT STATUS REPORT  
NUMBER 32  
(continued)**

**Problems Encountered/Resolved:**

Problems were encountered last period with the laboratory not analyzing the samples collected within specified holding times. Similar problems carried into this period also. All analytical data has been received (except for sample D-500 for EP Tox metals which have no specified holding times) and QA/QC information is summarized above. Currently, HART and CompuChem are discussing resolutions for correcting the errors presented by the lab exceeding the holding times of last set of samples.

**Scope of Work Changes:**

None.

**Action Next Period:**

- 1) Continued revisions of the Risk Assessment Report.
- 2) Collection of soil samples at the Site for treatability studies as part of the Feasibility Study and possible resampling of samples collected on July 31, 1990.
- 3) Completion of sample collection of Benthic organisms from the pond for inventory.
- 4) Revision of the RI Report to include EPA comments.

AR200331

**Summary of Valid Analytical Results for  
Soil Samples Collected on 07/31/90  
TCLP Analyses**

**Sample Identification**

Analyte	C-800	D-500*	F-600	Ash
<b>Metals:</b>				
Arsenic	8.5Q	--	ND	ND
Barium	875J	--	1580J	1220J
Cadmium	ND	--	ND	53.7
Chromium	ND	--	ND	41.6
Lead	69100J <sup>1</sup>	--	58.6	844000 <sup>1</sup>
Mercury	ND	--	ND	ND
Selenium	ND	--	ND	ND
Silver	ND	--	8.3Q	ND
<b>Pesticides:</b>				
Endrin	ND	ND	ND	ND
Lindane	ND	ND	ND	ND
Toxaphene	ND	ND	ND	ND
Methoxychlor	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND
Chlordane	ND	ND	ND	ND
<b>Herbicides:</b>				
2,4-D	ND	ND	ND	ND
2,4,5-TP (Silvex)	ND	ND	ND	ND
Volatiles:	All Invalid			
Semi-Volatiles:	All Invalid			

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**Notes:**

All result concentrations in parts per billion (ppb)

<sup>1</sup> These results are EP Toxic because they exceed the EP Tox lead standard of 5 ppm (5000 ppb)

ND Not Detected

\* EP Tox metals results for D-500 have not been received

**AR200332**

**Summary of Valid Analytical Results for  
Soil Samples Collected on 07/31/90  
EP Toxicity Analyses**

**Sample Identification**

<b>Analyte</b>	<b>C-800</b>	<b>D-500</b>	<b>F-600</b>	<b>Ash</b>
<b>Metals:</b>				
Arsenic	2.6Q	ND	ND	ND
Barium	1190	616	874	1490
Cadmium	ND	5.9	ND	22.4
Chromium	ND	ND	ND	ND
Lead	27500 <sup>1</sup>	126000 <sup>1</sup>	365	177000 <sup>1</sup>
Mercury	ND	ND	ND	ND
Selenium	ND	37.2	ND	ND
Silver	ND	ND	ND	ND
<b>Pesticides:</b>				
Endrin	ND	ND	ND	ND
Lindane	ND	ND	ND	ND
Toxaphene	ND	ND	ND	ND
Methoxychlor	ND	ND	ND	ND
<b>Herbicides:</b>				
2,4-D	ND	ND	ND	ND
2,4,5-TP (Silvex)	ND	ND	ND	ND

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**Notes:**

All result concentrations in parts per billion (ppb)

<sup>1</sup> These results are EP Toxic because they exceed the EP Tox lead standard of 5 ppm (5000 ppb)

ND Not Detected

**AR200333**